

What Is Claimed Is:

1. A perpendicular magnetic recording media testing method, comprising:

a step in which the output signal waveform from a magnetic head loaded at a prescribed radial position of perpendicular magnetic recording media rotating at a prescribed velocity is captured and stored;

a step in which the cross-correlation function between said stored output signal waveform and a reference waveform simulating spike noise is calculated; and,

a step in which the number of peaks of said cross-correlation function which exceed a preset threshold value is counted.

2. The perpendicular magnetic recording media testing method according to Claim 1, wherein a waveform having a single peak, either positive or negative, is used as said reference waveform simulating spike noise.

3. The perpendicular magnetic recording media testing method according to Claim 1, wherein a waveform having at least one positive peak, and at least one negative peak, is used as said reference waveform simulating spike noise.

4. The perpendicular magnetic recording media testing method according to Claim 1, wherein said perpendicular magnetic recording media is rotated at a fixed angular velocity, and as said reference waveform, a reference waveform with peak width adjusted according to the radial position of said magnetic head is used.

5. A perpendicular magnetic recording media testing method, comprising:

a step in which the operations to capture and store the output signal waveform from a magnetic head loaded at a prescribed radial position on perpendicular magnetic recording media, rotated at a prescribed velocity, are repeated a plurality of times, changing the radial position at which the head is loaded;

a step in which the cross-correlation function of said stored output signal waveform and a reference waveform which simulates spike noise is calculated for each radial position;

a step in which the coordinates on the media of those peak positions of said cross-correlation function which exceed a preset threshold value are stored; and,

a step in which a decision is made as to whether said peak position coordinates exist continuously on the media for a length equal to or greater than a preset length.

6. The perpendicular magnetic recording media testing method according to Claim 5, wherein a waveform having a single peak, either positive or negative, is used as said reference waveform simulating spike noise.

7. The perpendicular magnetic recording media testing method according to Claim 5, wherein a waveform having at least one positive peak, and at least one negative peak, is used as said reference waveform simulating spike noise.

8. The perpendicular magnetic recording media testing method according to Claim 5, wherein said perpendicular magnetic recording media is rotated at a fixed angular velocity, and as said reference waveform, a reference waveform with peak width adjusted according to the radial position of said magnetic head is used.

9. A perpendicular magnetic recording media testing method, comprising:

a step in which a magnetic head is loaded at a prescribed radial position on perpendicular magnetic recording media comprising a soft magnetic underlayer, and signals are recorded at a prescribed frequency;

a step in which said recorded signals are played back; and,

a step in which the type of effect on the playback signals of spike noise appearing in said playback signals is discriminated by means of the envelope shape of said playback signals.

10. The perpendicular magnetic recording media testing method according to Claim 9, wherein the amplitude modulation component contained in the playback signal waveform and corresponding to said spike noise is discriminated.

11. The perpendicular magnetic recording media testing method according to Claim 9, wherein the baseline shift of said playback signal is discriminated.

12. The perpendicular magnetic recording media testing method according to Claim 10, wherein said amplitude modulation is discriminated by means of a high-pass filter and envelope detector.

13. The perpendicular magnetic recording media testing method according to Claim 10, wherein said amplitude modulation is discriminated by a homodyne detector.

14. The perpendicular magnetic recording media testing method according to Claim 9, further comprising a step in which the amplitude modulation component is determined from the envelope shape of said playback signal; a step in which said amplitude modulation component is eliminated from said playback signal; and a step in which the baseline shift is determined from the playback signal with said amplitude modulation component removed.